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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,664	11/12/2003	Marvin D. Van Ee	CNH0001	5355

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EXAMINER

KOVACS, ARPAD F

ART UNIT PAPER NUMBER

3671

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,664

Applicant(s)

VAN EE, MARVIN D.

Examiner

Árpád Fábián Kovács

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 11-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/16/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC ' 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim(s) 11-12, 14, 16-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Redekop et al (5482508).

In re cl. 11:

Redekop discloses a chopper and discharge apparatus for use with a combine harvester having a combine harvester body, means for discharging separated straw from a rear discharge area of the combine harvester body, and means mounting the apparatus on the combine harvester body at a position adjacent the rear discharge area for receiving straw therefrom (col 1-3), the apparatus comprising:

a housing having a feed opening (15) and a discharge opening (16), a plurality of stationary blades mounted in the housing in axially spaced positions there along, the stationary blades lying in parallel radial planes (fig 2, ref 20);

a chopping assembly mounted in the housing (see fig 1, at chopping blades ref 19) and comprising a hub member mounted for rotation (17) about a longitudinal axis of the hub member (18) and a plurality of blade members (19) mounted on the hub member for rotation therewith about said axis, each blade member projecting generally

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outwardly from the hub member substantially in a radial plane of said axis (see fig 2) , the blade members being arranged at spaced positions along the length of the hub member such that rotation of the hub member causes each blade member to pass between two of the stationary blades in a cutting action (see fig 2);

the feed opening being arranged to deposit the material onto the chopping assembly in a direction generally inwardly toward the axis (see fig 1, at the feed opening ref 15 & at axis ref 18) and the discharge opening being arranged to allow discharge of the material generally radially outwardly from the chopping assembly (see fig 1, at ref 16);

each of at least some of the blade members including a blade formed from a flat strip which has a substantially planar mounting portion mounted on the hub member to lie in a radial plane of the hub member (21 or 43) an intermediate portion (from ref 44 to 42 on fig 4) and a substantially planar blade portion (50) wherein the strip is twisted or bent within the intermediate portion about a line longitudinal of the strip (as shown in fig 4) such that one side edge of the blade portion lies in a radial plane offset axially from a radial plane containing the other of the side edges of the blade portion (as best shown on fig 4, ref 50 being one plane having side edge 39 or 42 which is offset from the other edge 33);

in re claim 12:

the strip is twisted about a center line (for example at the center of ref 30, a plane taken along its center);

in re claim 14:

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the blade portion is at an angle of 90 to the radial plane (see fig 3 & 4, ref 50 is at right angle to 35);

in re claim 16-18:

the side edges of the blade portion are sharpened or each side edge is sharpened to a sharp edge lying in one surface of the blade portion or both side edges are sharpened to a sharp edge lying in the same surface of the blade portion (see fig 3, at ref 33 & an inherent second edge at 42 & 39; and 19B having one surface of the blade portion & a sharp edge);

in re claim 19:

the blades are arranged in pairs with each one of a pair being arranged on a respective side of one of the stationary blades (see fig 4);

in re claim 20:

as shown on fig 4, on the left side an another pair of blades (the right side pair is shown) are shown to have opposite angle to the angle of the pair of blades;

in re claim 21:

wherein each pair is mounted on a respective one of a plurality of lugs mounted on the hub member at spaced positions thereon (21), each lug having a pin (22) mounted thereon with a pin axis of the pin parallel to the axis of the hub member such that the pair of blade members can pivot on the pin about the pin axis (see fig 1, 2 & 3);

in re claim 23-25:

including some flat blade members each of which is defined solely by a planar cutting portion lying in a radial plane of the hub axis, and there are more flat blade

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members adjacent a center of the hub member than adjacent ends of the hub member, including some flat blade members each of which is defined solely by a planar cutting portion lying in a radial plane of the hub axis wherein the blade members are arranged in pairs with each one of a pair being arranged on a respective side of one of the stationary blades and with the sharpened leading edge of the blade members of each pair arranged adjacent the stationary blade, some of the pairs including one flat blade member and one twisted (fan) blade member (col 3, ln 2-6; fig 2; ref 33).

Claim Rejections - 35 USC ' 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim(s) 13, 15, 26, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Redekop et al (5482508), in view of Linn (4292795) and/or Wickham (4046488).

Redekop discloses the claimed device except for showing an alternative design choice for the blade twist or bend, constant width & an angle less than 90 degrees .

Linn and/or Wickham discloses that it is known in the art to design blade with a twist, constant width & an angle less than 90 degrees (Linn, see fig 3, ref 46; Wickham (fig 3, ref 14, 22, 20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the blade of Redekop with the alternative design choice of twist or bend, constant width & an angle less than 90 degrees taught by Linn and/or Wickham, in order to improve and/or provide alternative twisted & constant width & an angle less than 90 degrees blade, and to better minimize operational noise levels (Wickham, col 1, ln 11).

Allowable Subject Matter

Claims 1-10 are allowed.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Árpád Fábián Kovács whose telephone number is 703-308-5897. The examiner can normally be reached on Mo-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 703 308 3870. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Árpád Fábián Kovács
Primary Examiner
Art Unit 3671

ÁFK